

Remarks

In the above-referenced Office Action, the Examiner required that the application be retitled and indicated that the address of the inventor was missing. The Examiner also objected to claim 1 and rejected claims 1-23 under 35 U.S.C. § 102(e) as being anticipated by Hasan, Publication No. 2002/0165636.

The application has been retitled. Applicant notes that the application was filed with an Application Data Sheet and that the declaration signed by Applicant on February 21, 2002 (copy enclosed), was a Declaration approved by the US Patent and Trademark Office for use with an Application Data Sheet. This type of Declaration does not require the inventor's address. The inventor's address was included on the Application Data Sheet (copy enclosed).

The Examiner objected to claim 1 because of the terms "a target structure" and "recipe parameters." Applicant believes that these terms are clear and directs the Examiner to, for example, paragraph 25 of the specification. As shown in the embodiment of Fig. 1, a recipe extraction system 150 extracts a recipe, which is used by inspection or metrology tools to inspect or measure items such as dies for a chip. Example recipes are shown in Figs. 9 and 11, for example.

Applicant respectfully traverses the rejection of claims 1-23 under § 102(e) over Hasan. Applicant's invention, as recited in at least independent claims 1, 5, 17, and 23 is a method and apparatus that uses information from the mask data without the need for an exemplar wafer. The information present in the mask data is, in many cases, sufficient to find target sites, alignment sites, and to determine the other parameters necessary to generate a recipe. This avoids the problem of having to wait for an exemplar wafer to become available for a given device, layout, and process level. Waiting for an exemplar wafer means that a first measurement or inspection cannot be performed until later in the manufacturing process since a wafer does not exist until later in the manufacturing process. Each independent claim has been amended to explicitly recite that the initial analysis part of the method/system is performed before an exemplar such as a wafer is created.

In contrast, Hasan discloses the use of two or more measurement tools, some of which are stand-alone tools and others of which are attached to process tools. These tools require the use of an exemplar wafer for a given device type and layout in order to generate a recipe. Hanson does not operate until an exemplar is available. Recipes and data generated on one tool can then be

used by one or more of the other tools. This is desirable since the measurement tools attached to process tools may not have user interfaces associated with them.

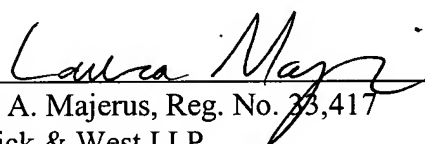
Because Hanson requires that an exemplar be in existence before analysis can be performed, the system of Hanson introduces an undesirable time lag between the time that a first exemplar is available for a given device and a first measurement or inspection can be performed. Additionally, the method of Hanson requires a skilled operator to be present to generate the recipe and the availability of an additional stand-alone measurement tool.

For at least the reasons discussed above, independent claims 1, 5, 17, and 23 patentably distinguish over the cited document. Dependent claims 2-4-, 6-16, and 18-22 variously depend from claims 1, 5, 17, and 23 and are patentably distinct for at least the reasons cited above in connection with the independent claims. Applicant disagrees with the Examiner's characterization of Hanson as disclosing or suggesting the pending dependent claims because, as discussed above, the system of Hanson and applicant's pending claims relate to fundamentally different systems.

A Notice of Allowance is respectfully requested.

Respectfully submitted,  
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